

IN THE CLAIMS

Please amend the claims as follows:

Claim 1. (Currently Amended) A fluorine gas generator for generating fluorine gas by electrolyzing an electrolyte electrolytic bath comprising a hydrogen fluoride-containing mixed molten salt, which generator is equipped with:

a hydrogen fluoride gas feed line, one end of which is connected to a hydrogen fluoride gas supply source and the other end of which is connected to a hydrogen fluoride gas inlet disposed in an electrolyte in the electrolyte electrolytic bath, for feeding hydrogen fluoride gas into the electrolytic bath,

a first automatic valve disposed on said hydrogen fluoride gas feed line and capable of being closed on the occasion of interruption of hydrogen fluoride gas feeding, and

an inert gas substitution means for eliminating the hydrogen fluoride gas remaining in at least part of said line on the side downstream from said first automatic valve on said hydrogen fluoride gas feed line, which part is located downstream of said first automatic valve and upstream of said hydrogen fluoride gas inlet, and substituting an inert gas therefor on the occasion of interruption of hydrogen fluoride gas feeding,

wherein said inert gas substitution means comprises an inert gas feed line directly connected to said hydrogen fluoride gas feed line.

Claim 2. (Previously Presented) The fluorine gas generator according to claim 1, wherein said inert gas substitution means further comprises a detecting means for detecting interruption of feeding of the hydrogen fluoride gas, wherein said inert gas feed line is provided for feeding the inert gas to said hydrogen fluoride gas feed line on the side downstream from said first automatic valve, further comprising a second automatic valve disposed on said inert gas feed line and operated in association with said detecting means to

feed the inert gas into said line on the side downstream from said first automatic valve on said hydrogen fluoride gas feed line.

Claim 3. (Previously Presented) The fluorine gas generator according to claim 2, wherein said inert gas feed line is provided with an inert gas storage tank for storing the inert gas to be fed.

Claim 4. (Currently Amended) A fluorine gas generator for generating fluorine gas by electrolyzing an electrolyte electrolytic bath comprising a hydrogen fluoride-containing mixed molten salt, which generator is equipped with:

a hydrogen fluoride gas feed line, one end of which is connected to a hydrogen fluoride gas supply source and the other end of which is connected to a hydrogen fluoride gas inlet disposed in an electrolyte in the electrolytic bath, for feeding hydrogen fluoride gas into the electrolyte electrolytic bath,

a first automatic valve disposed on said hydrogen fluoride gas feed line and capable of being closed on the occasion of interruption of hydrogen fluoride gas feeding, and

an inert gas substitution means for eliminating the hydrogen fluoride gas remaining in at least part of said line on the side downstream from said first automatic valve on said hydrogen fluoride gas feed line, which part is located downstream of said first automatic valve and upstream of said hydrogen fluoride gas inlet, and substituting an inert gas therefor in case of emergency in the fluorine gas generator,

wherein said inert gas substitution means comprises an inert gas feed line directly connected to said hydrogen fluoride gas feed line.

Claim 5. (Previously Presented) The fluorine gas generator according to claim 4, wherein said inert gas substitution means further includes an inert gas storage tank for storing the inert gas to be fed.

Claim 6. (Currently Amended) A fluorine gas generator for generating fluorine gas by electrolyzing an electrolyte electrolytic bath comprising a hydrogen fluoride-containing mixed molten salt, which generator is equipped with:

a hydrogen fluoride gas feed line, one end of which is connected to a hydrogen fluoride gas supply source and the other end of which is connected to a hydrogen fluoride gas inlet disposed in an electrolyte in the electrolytic bath, for feeding hydrogen fluoride gas into the electrolyte electrolytic bath,

a first automatic valve disposed on said hydrogen fluoride gas feed line and capable of being closed on the occasion of interruption of hydrogen fluoride gas feeding, and

an inert gas substitution means for eliminating the hydrogen fluoride gas remaining in at least part of said line on the side downstream from said first automatic valve on said hydrogen fluoride gas feed line, which part is located downstream of said first automatic valve and upstream of said hydrogen fluoride gas inlet, and substituting an inert gas therefor in case the first automatic valve is closed,

wherein said inert gas substitution means comprises an inert gas feed line directly connected to said hydrogen fluoride gas feed line.

Claim 7. (Previously Presented) The fluorine gas generator according to claim 6, wherein said inert gas substitution means further comprises a detecting means for detecting interruption of feeding of the hydrogen fluoride gas, wherein said inert gas feed line is provided for feeding the inert gas to said hydrogen fluoride gas feed line on the side

downstream from said first automatic valve, further comprising a second automatic valve disposed on said inert gas feed line and operated in association with said detecting means to feed the inert gas into said line on the side downstream from said first automatic valve on said hydrogen fluoride gas feed line.

Claim 8. (Previously Presented) The fluorine gas generator according to claim 7, further comprising an inert gas storage tank for storing the inert gas to be fed.

Claim 9. (Previously Presented) The fluorine gas generator according to claim 6, wherein said inert gas substitution means further includes an inert gas storage tank for storing the inert gas to be fed.

Claim 10. (New) The fluorine gas generator according to claim 1, wherein said hydrogen fluoride feed line is kept from being closed by back-flow and solidified electrolyte.

Claim 11. (New) The fluorine gas generator according to claim 4, wherein said hydrogen fluoride feed line is kept from being closed by back-flow and solidified electrolyte.

Claim 12. (New) The fluorine gas generator according to claim 6, wherein said hydrogen fluoride feed line is kept from being closed by back-flow and solidified electrolyte.